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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,568	11/15/2001	Yoshinori Miwa	862.C2438	7349
5514	7590	12/11/2003	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			NGUYEN, HUNG	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,568	Applicant(s) MIWA, YOSHINORI	
	Examiner Hung Henry V Nguyen	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE and amendment filed 9/8/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-19,21-25 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-19,21-25 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/15/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 8, 2003 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3-25, 32-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1, 18, 21, 24, 25 are ambiguous and indefinite as due to the alternative recitation of the second housing as "being installed adjacent to said first housing OR installed in an interior of said first housing". Since the third housing being installed between an inside space and an outside space of said first housing, said third housing being different from said first and second housings" and the two structures of the second housing, as claimed are not equivalent and the claims are ambiguous as to which of two distinct embodiments is encompassed by the claim. Please clarify.

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As to claim 34, the recitation of “a third housing being installed between an inside space and an outside space of said first housing and second housing” is vague and indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 18, 21, 24-25, 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyaji et al (U.S.Pat. 5,559,584).

With respect to claims 1, 18, 21, 24-25, and 34-36, Miyaji et al discloses an exposure apparatus for transferring a predetermined pattern formed on a reticle onto a substrate, and comprising all basic features of the instant claims including: a stage (RT) being able to install a master (R); a first housing (1) surrounding the master stage; a second housing (13) for stocking at least one of the masters, the second housing being allowed to communicate with the first housing via shutter S1 and shutter S2; a third housing (12) being installed between an inside space and an outside space of the first housing (one door of shutter S1 located inside of the housing 1, as clearly illustrated in figure 5); wherein the master is transferred to the first housing and is extracted from the second housing via the third housing and wherein the first and second housing are filled by an inert gas or are adapted to be evacuated (see col.9, lines 5-32).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-17, 21, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suenaga et al (U.S.Pat. 6,451,507) in view of Miyaji (U.S.Pat. 5,559,584).

With regard to claims 1, 3-17, 21 and 34-36 Suenaga et al (fig.4) discloses an exposure apparatus for transferring a predetermined pattern formed on a reticle onto a substrate comprising substantially all structures of the instant invention as claimed including: a first chamber (170) for surrounding an exposure position of the reticle (R); a second housing (210) for stocking the reticle; and a third housing for (174) for housing the reticle which is transferred between inside and outside of the first housing wherein the interiors of the first and third housing are detected and controlled to a predetermined temperature (see col.18, lines 26 thru col.19, line 50), and the reticle transferred from the outside of the first chamber (170) via the third housing is stocked by the second housing (see fig.4). Each of housing comprises opening/or closing means (173, 177 for instance); the second housing has a shelf like structures for stocking a plurality of reticles; the exposure apparatus includes alignment means for aligning the master (see col.6, lines 1-13) and transfer means for transferring the reticle between the housings (see fig.4). Suenaga further teaches the predetermined temperature including an inert gas atmosphere (see col.12, lines 1 thru col.16, line 42 and col.18, lines 53-60) and the atmosphere is controlled by a

circulation system via concentration sensors (137A-137D) and the exposure light source includes an F2 excimer laser (see col.15, line 17). Suenaga does not specifically disclose the third housing being installed between an inside space and an outside space of the first housing and the second housing being filled by an inert gas or adapted to be evacuated. Miyaji discloses an exposure apparatus having a first housing (1) surrounding the master stage; a second housing (13) for stocking at least one of the masters, the second housing being allowed to communicate with the first housing via shutter S1 and shutter S2; a third housing (12) being installed between an inside space and an outside space of the first housing wherein the master is transferred to the first housing and is extracted from the second housing via the third housing and wherein the first and second housing are filled by an inert gas or are adapted to be evacuated (see col.9, lines 5-32). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Suenaga and Miyaji to obtain the invention as specified in the above claims. It would have been obvious to a skilled artisan to arrange the housings of the exposure device of Suenaga where the third housing is placed between an inside space and an outside space of the first housing as taught by Miyaji for at least the purpose of simplification of structures and/or the transportation of the reticle between the exposure position and the stocking is not complicated. Further, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Further, it would have been obvious one having ordinary skill in the art to fill the first and second housing with an inert gas or to evacuate the first and second housing for keeping the reticle from being damaged and being contaminated whereby the quality of the images is improved.

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9. Claims 18-19, 22-25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Suenaga et al (U.S.Pat. 6,451,507) in view of Miyaji (U.S.Pat. 5,559,584) and further in view of Umatate et al (U.S.Pat. 5,243,377).

With regard to claims 18-19, 22-25, Suenaga et al as modified by Miyaji et al discloses an exposure apparatus/method comprising substantially all of the limitations of the instant claims as discussed except for the apparatus being connected to a computer/and or a local area network. Umatate et al discloses a plural exposure apparatuses and a host system (H-COM), a network interface, a computer and the information relating to each of the exposure apparatuses can be communicated by a computer network (see fig.1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Suenaga as modified by Miyaji and Umatate to obtain the claimed invention. It would have been obvious to a skilled artisan to employ a computer network/LAN as taught by Umatate for the exposure apparatus/method of Suenaga as modified by Miyaji for the purpose of managing, analyzing, maintenance and troubleshooting of the exposure apparatus and thus improving the operation of the device.

Response to Amendment

10. Applicant's amendments to the claims have been entered. New claims 33-36 have been added. Applicant's arguments with respect to the prior art have been carefully considered but have been traversed in view of new grounds of rejection as set forth above. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of

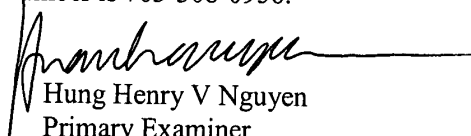
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the claims patentably distinguishes them from the references. In response to applicant's argument that in Miyaji's invention, the third space is between the first and second spaces rather than being installed in an inside space and an outside space of the first space, and the second space is not installed adjacent to the first space or is not installed in an interior of the first space; the Examiner respectfully disagrees with the applicant. Miyaji meets the limitations as claimed since in Miyaji's reference, the third housing (12) is installed between an inside space and an outside space of the first housing (one door of shutter S1 located inside of the housing 1, see fig.5) and the master (R) is transferred to the first housing and is extracted from the second housing via the third housing and the first housing (1) and second housing (13) are filled by an inert gas or are adapted to be evacuated (see col.9, lines 5-32).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 703-305-6462. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Hung Henry V Nguyen
Primary Examiner
Art Unit 2851

hvn
12/1/03